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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,482	11/03/2003	Shigeo Ishida	117649	3222

25944 7590 11/06/2006

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EXAMINER	
HAUGLAND, SCOTT J	
ART UNIT	PAPER NUMBER
3654	

DATE MAILED: 11/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/698,482	ISHIDA ET AL.	
	Examiner	Art Unit	
	Scott Haugland	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5, 6, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taubenberger (U.S. Patent No. 5,685,471) in view of Focke et al (U.S. Patent No. 4,603,800).

Taubenberger discloses a printing apparatus comprising a printing unit DA and a continuous paper transporting mechanism. The paper transporting mechanism comprises a frictionally transporting section 13, paper braking sections (6 and the braking section comprising axles 2; col. 1, lines 35-37), a paper-position restriction section 3 having a pair of rollers 4 arranged at an oblique angle to the paper transporting direction, and buffer unit 10. Note that the paper-position restricting section 3 is arranged between the paper transporting section 13 and the paper braking section comprising axles 2.

Taubenberger does not disclose that the buffer unit is configured to separate from the surface of the continuous paper when the continuous paper is feeding forward.

Focke et al teaches spacing rollers 33, 34 of a web accumulator apart during normal feeding and processing of the web so that the web is fed in a straight line without contact with the rollers. The rollers are moved into a web engaging and accumulating configuration only when the accumulator is required for temporary storage of a length of web.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Taubenberger with an accumulator having pushing-out members or rollers (buffer unit) that are moved away from the web being fed to the printer during printing and normal forward feeding of the web to the printer as taught by Focke et al to eliminate unnecessary interference of the accumulator with the web when it is not necessary to store additional web material.

Claims 9 and 10 recite intended use. The modified apparatus of Taubenberger is capable of use as claimed. In addition, with regard to claim 9, it would have been obvious to drive the buffer before and after reverse feeding to accommodate the spacing between the buffer rollers and the material (as taught by Focke et al) and to ensure that all of the slack in the reversely moving material is taken up. Additionally, with regard to claim 10, note that the buffer unit 10 of Taubenberger would start driving when the frictionally transporting section starts to transport the paper toward the printer since the loop of paper around 10 starts to shorten when the feed rollers 13 start. Also, note that the buffer unit 10 is moved in a direction away from the surface of the paper as an amount of buffer of the continuous paper is decreased as in Applicants' invention.

Claims 1-4, 7, 8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taubenberger (U.S. Patent No. 5,685,471) in view of Focke et al (U.S. Patent No. 4,603,800) or over Taubenberger in view of Ohba et al (U.S. Patent No. 6,592,276) and Focke et al.

Taubenberger is described above.

It appears that the printing section of Taubenberger is disposed on a downstream side of the frictionally transporting section, as recited on the last two lines of claim 1 since elements 13 are disclosed as being feed rollers and they are immediately adjacent to the entrance of printing unit DA.

Assuming, arguendo, that Taubenberger does not teach the downstream position of the printing section required by claims 1 and 11, Ohba et al teaches locating a printing section for printing on continuous paper web downstream of feed rollers 8, 9 of a paper transporting mechanism.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to locate the printing section of Taubenberger on the downstream side of the frictionally transporting section as taught by Ohba et al to feed the paper through the printing section without excessive tension in the printing section.

Taubenberger does not disclose that the buffer unit is configured to separate from the surface of the continuous paper when the continuous paper is feeding forward (claims 1 and 11). Taubenberger does not disclose that the pushing-out member is located at a position spaced apart from the paper during printing (claim 3).

Focke et al teaches spacing rollers 33, 34 of a web accumulator apart during normal feeding and processing of the web so that the web is fed in a straight line without contact with the rollers. The rollers are moved into a web engaging and accumulating configuration only when the accumulator is required for temporary storage of a length of web.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Taubenberger with an accumulator having pushing-out members or rollers that are moved away from the web being fed to the printer during printing and normal feeding of the web to the printer as taught by Focke et al to eliminate unnecessary interference of the accumulator with the web when it is not necessary to store additional web material.

Claims 7 and 8 recite intended use. The modified apparatus of Taubenberger is capable of use as claimed. In addition, with regard to claim 7, it would have been obvious to drive the buffer before and after reverse feeding to accommodate the spacing between the buffer rollers and the material (as in Focke et al) and to ensure that all of the slack in the reversely moving material is taken up. Additionally, with regard to claim 8, note that the buffer unit 10 of Taubenberger would start driving when the frictionally transporting section starts to transport the paper toward the printer since the loop of paper around 10 starts to shorten when the feed rollers 13 start. Also, note that the buffer unit 10 is moved in a direction away from the surface of the paper as an amount of buffer of the continuous paper is decreased as in Applicants' invention.

Response to Arguments

Applicants' arguments filed 8/10/06 have been fully considered but they are not persuasive.

Applicants argue that it would not have been obvious to modify Taubenberger with the accumulator taught by Focke since the accumulator in Taubenberger is designed to provide high positional accuracy of conveyance for printing a continuous web and the accumulator taught by Focke is unrelated to providing positional accuracy and is provided to allow ends of sheet material to be spliced without interrupting feed of the material. However, while the overall devices disclosed by Taubenberger and Focke are disclosed for different specific purposes, they both include accumulators which necessarily perform similar functions. In both cases, the accumulators provide a degree of isolation between a source of sheet material and its destination, allowing differences in material speeds between the inputs and outputs of the accumulators. Additionally, the apparatus disclosed by Taubenberger and Focke both have the common characteristic that storage of material (by the accumulators) is not required at all times. Due to the similar functions of the accumulators in Taubenberger and Focke, an ordinary artisan would have been motivated to substitute the accumulator of Focke which moves out of contact with material when storage of material is not needed to eliminate unnecessary resistance and other interference of the accumulator with normal feeding of material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (571) 272-6945. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sjh
10/19/06

WILLIAM A. RIVERA
PRIMARY EXAMINER